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09/614,065	07/11/2000	Wayne Ihde	ADAPP136	1393

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/614,065	Applicant(s) IHDE, WAYNE	
	Examiner Michael V Battaglia	Art Unit 2652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 June 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-9,11-18,20 and 21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *5,6 and 12-14* is/are allowed.

6)☒ Claim(s) *1,2,4,7-9,11,15-18,20 and 21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 July 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. In view of the appeal brief filed on June 7, 2004, PROSECUTION IS HEREBY REOPENED. New grounds of the rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claims 1, 2, 4-9, 11-18, 20 and 21 are pending. Claims 3, 10 and 19 have been cancelled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 7-9, 11, 15, 17, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (hereafter Ito) (US 6,160,778) in view of Funamoto (US 5,532,992).

In regard to claim 1, Ito discloses a method for verifying sectors on an optical disc, comprising: writing user data to unverified sectors of the optical disc; verifying the unverified sectors of the optical disc by reading the user data on the unverified sectors of the optical disc; the verifying of the unverified sectors establishing verified sectors having user data (Col. 18, lines 37-42 and 53-62); verifying a bitmap area on the optical disc; and writing a bitmap to the bitmap area, wherein the bitmap tracks which sectors of the optical disc have been verified (Col. 19, lines 41-44 and 46-48). It is noted that the bitmap area of Ito is part of the file system area and is verified when the file system area is verified (Col. 19, line 56-Col. 20, line 7) and that the bit map tracks which sectors have been verified for the reasons stated below in the response to arguments section. Ito does not disclose how the user data read from the unverified sectors of the optical disc is verified and therefore does not disclose comparing the user data read from the unverified sectors of the optical disc with user data stored on a system buffer to determine whether any one of the unverified sectors having user data is defective.

Funamoto discloses verifying unverified sectors of an optical disc by reading user data on the unverified sectors of the optical disc (Col. 9, lines 35-37) and comparing the user data read from the unverified sectors of the optical disc with user data stored on a system buffer (Fig. 1, element 12) to determine whether any one of the unverified sectors having user data is defective (Col. 9, lines 40-47), the verifying of the unverified sectors establishing verified sectors having user data (Col. 9, lines 48-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to verify the unverified sectors of the optical disc of Ito by comparing the user data read from the unverified sectors of the optical disc with user data

stored on a system buffer to determine whether any one of the unverified sectors having user data is defective as suggested by Funamoto, the motivation being to verify unverified sectors of the optical disc in a manner known in the art.

In regard to claim 9, Ito discloses a method for verifying sectors on an optical disc, comprising: writing user data from a source to sectors of the optical disc; verifying the sectors of the optical disc to determine whether any one of the sectors is defective (Col. 18, lines 37-42 and 53-62); and writing a bitmap to the optical disc, the bitmap being using to determine which of the sectors on the optical disc have been verified (Col. 19, lines 41-44 and 46-48). Ito does not disclose how the sectors of the optical disc are verified and therefore does not disclose comparing the written user data to user data resident on the source to determine whether any one of the sectors is defective and verify the sectors. It is noted that the bit map is used to determine which of the sectors on the optical disc have been verified for the reasons stated below in the response to arguments section.

Funamoto discloses verifying sectors of an optical disc by comparing written user data to user data resident on a source (Fig. 1, element 12) to determine whether any one of the sectors is defective (Col. 9, lines 40-47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to verify the sectors of the optical disc of Ito by comparing written user data to user data resident on a source to determine whether any one of the sectors is defective as suggested by Funamoto, the motivation being to verify sectors of the optical disc in a manner known in the art.

In regard to claim 17, Ito discloses a method for optical disc verification, comprising: writing user data located on a system buffer (Fig. 7, element 736) to sectors of

an optical disc; verifying the sectors of the optical disc by reading the user data from the sectors on the optical disc to determine if any of the sectors of the optical disc are defective (Col. 18, lines 37-42 and 53-62), and writing a bitmap that tracks which sectors of the optical disc have been verified (Col. 19, lines 41-44 and 46-48). Ito does not disclose how the sectors of the optical disc are verified and therefore does not disclose that the verifying is carried out by reading the user data from the sectors on the optical disc and comparing the user data read from the sectors of the optical disc with the user data stored on the system buffer. It is noted that the bitmap tracks which sectors of the optical disc have been verified for the reasons stated below in the response to arguments section.

Funamoto discloses verifying sectors of an optical disc by reading user data from the sectors of the optical disc (Col. 9, lines 35-37) and comparing the user data read from the sectors of the optical disc with user data stored on a system buffer (Fig. 1, element 12) to determine if any of the sectors of the optical disc are defective (Col. 9, lines 40-47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to verify the sectors of the optical disc of Ito by reading user data from the sectors of the optical disc and comparing the user data read from the sectors of the optical disc with user data stored on a system buffer to determine if any of the sectors of the optical disc are defective as suggested by Funamoto, the motivation being to verify sectors of the optical disc in a manner known in the art.

In regard to claims 2, 11, and 18, Ito discloses verifying a file system area on the optical disc and writing a file system to the file system area, wherein the file system is a data structure for locations of the user data on the optical disc (Col. 19, line 56-Col 20, line 8).

In regard to claim 7, Ito discloses sparing user data contained on a defective sector (Col. 4, lines 59-61).

In regard to claim 8, Ito discloses updating the file system after the user data has been moved to a different sector of the optical disc in the sparing operation (Col. 15, lines 37-48).

In regard to claims 15 and 20, Ito discloses updating the bitmap after the sectors of the optical disc have been verified (Col. 19, lines 35-64).

3. Claims 4, 16, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito in view of Funamoto as applied to claims 1, 15 and 20 above, and further in view of Brown et al (hereafter Brown) (US 5,337,197).

Ito in view of Funamoto discloses a method for verifying sectors of an optical disc comprising verifying a bitmap area on the optical disc and writing a bitmap to the bitmap area, wherein the bitmap tracks and determines which sectors of the optical disc have been verified and updating the bitmap after the sectors of the optical disc have been verified as claimed in claims 1, 15 and 20. Ito in view of Funamoto does not disclose deleting the bitmap after verification of the optical disc is complete.

Brown discloses a method for verifying sectors of a disc and writing a directory consistency block on the disc that contains location information for unverified sectors (Col. 2, lines 43-46). The directory consistency area is interpreted as a bitmap that tracks verified sectors of the optical disc because in Brown's method, data is verified after it is written (Col. 2, lines 26-27) and the directory consistency block tracks verified sectors of the disc by containing information about the sectors to be updated, which are the unverified sectors of the disc (Col. 2, lines 43-46). After the unverified sectors have been

verified, the directory consistency block is deleted (Col. 2, lines 51-54). Furthermore, as does the bitmap in the current invention, the presence or absence of the directory consistency block on the disc indicates the verification status of the disc (Col. 3, lines 6-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to delete the bitmap in the method of Ito in view of Funamoto after the sectors of the disc have been verified as suggested by Brown; the motivation being to indicate the verification status of the disc.

Allowable Subject Matter

4. Claims 5, 6 and 12-14 are allowable over the prior art of record.

Response to Arguments

5. Applicant's arguments with respect to Ito not disclosing comparing reproduced written user data to user data resident in the system buffer have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's arguments filed June 7, 2004 with respect to Ito not disclosing a bitmap that tracks verified sectors have been fully considered but they are not persuasive. It is noted that the tracking of unverified sectors is not claimed in claims 1, 9 or 17 and that unverified sectors can be tracked without the use of a bitmap. The bitmap of Ito stores verified sectors as a "1" (Col. 19, lines 41-44) and defective sectors as a "0" (Col. 19, lines 46-48). Therefore, the bitmap tracks which sectors have been verified and determines which sectors have been verified.

7. Applicant's arguments with respect to claims 4, 16 and 21 have been considered but are moot in view of the new ground(s) of rejection .

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V Battaglia whose telephone number is (703) 305-4534. The examiner can normally be reached on 5-4/9 Plan with 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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